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### Bryston 14B-ST Pro Amplifier Wins 2000 TEC Award

Bryston is pleased to announce our 14B ST Professional Amplifier received the 2000 TEC Award from Mix Foundation for Excellence in Audio and outstanding achievement in the audio industry.

The award is given to the product that represents the best Technical Excellence and Creativity in the Category of Amplifier Technology.

This is the second year in a row that Bryston has received this very prestigious award. The 9B ST Pro was last year's winner.

Time to go for a Hat Trick!

### BRYSTON 9B-ST GETS CLASS A RATING

Bryston is pleased to announce that our 9B-ST THX amplifier received a 'Class A' rating in the October 2000 issue of Stereophile Magazine.

The 9B-ST is a 5-channel 120 watt @ 8 ohms and 200 watts @ 4 ohms amplifier employing completely sepa-

## Enough With The Channels!

Many times I get asked how in the future surround sound will be enjoyed in our homes. There are really three issues: one deals with Home Theater playback one with multi-channel high resolution audio playback in either SACD (Sony) or DVD AUDIO and one with good old 2-channel Stereo.

1. The stereo (2 channel) issue is a big question. Will people continue to listen in Stereo (as is 48K/24 bit or with higher 96-192k bit rates) or will the high-end audiophile move towards multi-channel formats? There is still a strong argument in favour of a good quality 2-channel system being able to present a musical experience in a highly accurate way. Being able to create a believable three dimensional sound-stage in 2 channels can be very convincing if the recording and the setup are well done. Also the easy of setup and space requirements is much more possible in most people's homes than the dedicated type rooms required for multi-channel applications. The logistics and expense of replicating the quality of the front 2 channels with a center and rears to match is also a very real financial issue for most people.

2. As far as surround sound Home Theater is concerned things have pretty well stabilized. The movie recording standard in the industry at this point is 5.1 (Left, Center, Right, Left Surround, Right Surround and Subwoofer) 48 KHz/24 Bit. In fact most movies are released in 44.1K/16Bit. One of the problems we face is the fact that there are always new systems proposed (6.1, 7.1, 10.2, THX EX, etc.) The DVD Movie industry is 5.1/48K/24bit and as I understand it will remain that way because of the 'data rates' (9.6 Mbpersec maximum) available on DVD Video discs. In other words when you put Video and Audio on the same disc there is only so much storage and decoding speed available. Every major movie-

scoring engineer I have discussed this with says that 5.1/48K/24bit is the recording standard used at this point and probably will remain so for a long time to come. So it appears you can safely invest in a 5.1 Home Theater Surround System without fear of the sky falling. If the standards change in the future then the 5.1 system remains the nucleus to build around.

3. If we look at the DVD Audio or the Sony SACD side then things are much less clear. Standards have been discussed which include a number of options available to the recording engineer from 44 kHz up to 192 kHz or combinations thereof. Some DVD-A engineers I have spoken with say they may use very high resolution 192k in the front 2 channels for instance and lower resolution for center and surrounds (again because of the 'data rates' of the disc). Part of what I am saying is that these issues are still in a state of flux and I do not think anyone at this point can be certain where it will all end up.

The other concern is that all of the DVD Audio players and SACD players I am aware of at this point in time only offer 'Analogue Outputs' so what you really need is a 6 channel analogue preamp not a digital processor. Our assumption is once they solve the copy code issues (apparently that is a problem because the code prevention methods so far are very audible and hackable) DVD Audio and SACD will offer digital bit stream outs and then the surround preamp/processors could use the internal DACs to decoded them. Problem is, as stated above at this point who knows what sampling rates, type of connector(s) required and channel numbers will be applicable. So to purchase a preamp/processor for high resolution audio only playback may not be very prudent unless 'upgrade adaptability' is available.

rate and totally independent power supplies for each of the five channels. The channels are modular in design for easy of service and application.

The 9B-ST THX is also available in two, three and four channel versions as well due to its modular design. This allows the customer to add more channels to the existing 9B (in an addition chassis) for systems requiring more than 5 channels and also provides for adding more channels to an existing non populated 9B chassis if extra channels are required in the future.

An example would be a 7.1 system where one 9B would provide 5 channels and another 9B with 2 channels installed would allow for the additional 2 channels. Then if more channels were required in the future it is easy to insert more modules up to an additional three channels.



The issue of the standard(s) of channels required is a tougher one. As I understand it the standard for DVD Audio, HDTV and DVD Video is 5.1. So most software will be produced this way and therefore should probably be played back this way. There will certainly be exceptions but I think the majority of people will use 5.1 playback in their homes. I don't know about you but a lot of people I speak with have enough trouble fitting in 5.1 channels let alone 6 or 7.

In conclusion, where does this leave us? Well, 2 channel stereo in its' current form or with a higher data rate will probably remain strong. The only issue is whether the CD/DVD player you currently own is capable of the

higher bit rates so that may necessitate the purchase of a new player at some point.

Home Theater 5.1 will remain the status quo for some reasonable time and even if it evolves in other directions 5.1 will still be the 'default' system for surround home movies.

So, it appears the big question at this juncture is, what form 'multi-channel high resolution audio play-back' will take. The DACs required playing these systems, the number of channels, the data rate speeds; software availability, copy-code etc. are still under discussion. So it remains a wait and see issue.

## Movies Continued

Some updated movies monitored using PMC Loudspeakers and Bryston Amplifiers:

Terminator II Ultimate

Little Nicky

Red Planet

Men Of Honour

The Legend Of Bagger Vance

A Girl on The Bridge

Soul Survivor

Space Cowboys

Mission Impossible II

Patriot

Shaft

The Insider



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